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**CLAIM AMENDMENTS:**

1. (Currently Amended) A method for etching a capacitor structure within a silicon substrate, said method comprising:

providing a masked substrate comprising a patterned masking layer over said silicon substrate, said patterned masking layer having at least one aperture formed therein;

performing a series of at least two-process steps upon said masked substrate silicon substrate through said at least one aperture in said patterned masking layer, said series of at least two-process steps comprising (a) an isotropic plasma etching step in which said silicon substrate is etched through said at least one aperture; and (b) a plasma deposition step in which a passivating layer is deposited on said silicon substrate; and

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repeating said series of at least two-process steps until a desired etch depth for said capacitor structure is achieved, wherein said capacitor structure has comprises an etched sidewall with an undulating profile that has an increased surface area relative to a smooth sidewall.

2. (Original) The method according to claim 1 wherein said capacitor structure ranges from 1-10.0 microns in vertical dimension.

3. (Currently Amended) The method according to claim 1, wherein said capacitor structure is a trench structure.

4. (Original) The method according to claim 1 wherein said capacitor structure is an elevated structure.

5. (Cancelled)

6. (Cancelled)

7. (Cancelled)

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8. (Cancelled)

9. (Cancelled)

10. (Cancelled)

11. (Currently Amended) The method according to claim 6, claim 1 wherein said isotropic etching step is performed in the presence of a source gas comprising one or more of SF<sub>6</sub>, Cl<sub>2</sub>, NF<sub>3</sub> and CF<sub>4</sub>.

12. (Currently Amended) The method according to claim 6, claim 1 wherein said isotropic etching step is performed in the presence of a source gas comprising SF<sub>6</sub>.

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13. (Currently Amended) The method according to claim 6, claim 1 wherein said deposition step is performed in the presence of a source gas comprising a fluorocarbon gas or a fluorohydrocarbon gas.

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14. (Currently Amended) The method according to claim 6, claim 1 wherein said deposition step is performed in the presence of a source gas comprising one or more of C<sub>4</sub>F<sub>8</sub>, CH<sub>2</sub>F<sub>2</sub>, CHF<sub>3</sub>, and C<sub>4</sub>F<sub>6</sub>.

15. (Currently Amended) The method according to claim 6, claim 1 wherein said deposition step is performed in the presence of a source gas comprising C<sub>4</sub>F<sub>8</sub>.

16. (Original) The method according to claim 1 wherein said etching step is conducted at a plasma density ranging from 10<sup>11</sup> to 10<sup>12</sup> cm<sup>-3</sup>.

17. (Original) The method according to claim 1 wherein said etching step proceeds at a rate ranging from 1-3 microns per minute.

18. (Withdrawn)

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19. (Withdrawn)

20. (Withdrawn)

21. (Withdrawn)

22. (Withdrawn)

23. (Withdrawn)

24. (Newly added) The method according to claim 1, wherein said capacitor structure is a trench structure, wherein said isotropic etching step is performed in the presence of a source gas comprising SF<sub>6</sub>, and wherein said deposition step is performed in the presence of a source gas comprising C<sub>4</sub>F<sub>8</sub>.

*(initials)*